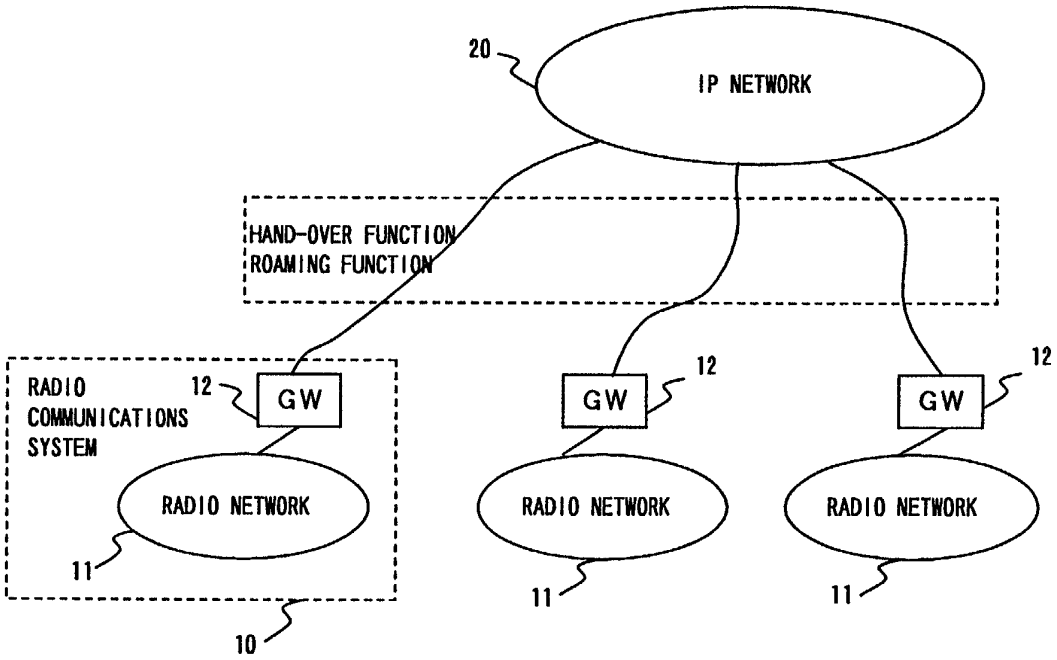

20
IP NETWORK
HAND-OVER FUNCTION
ROAMING FUNCTION
RADIO
COMMUNICATIONS
SYSTEM
12
GW
RADIO NETWORK
11
10
12
GW
RADIO NETWORK
11
12
GW
RADIO NETWORK
11

FIG. 1

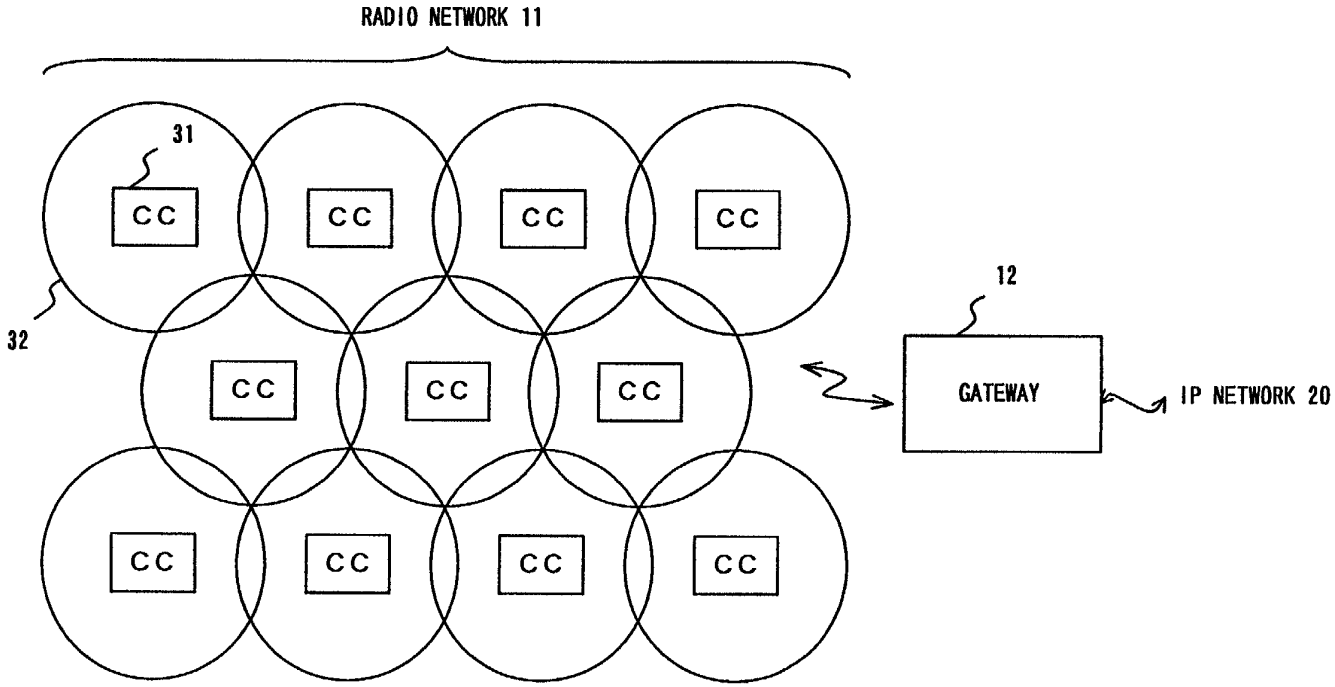


FIG. 2

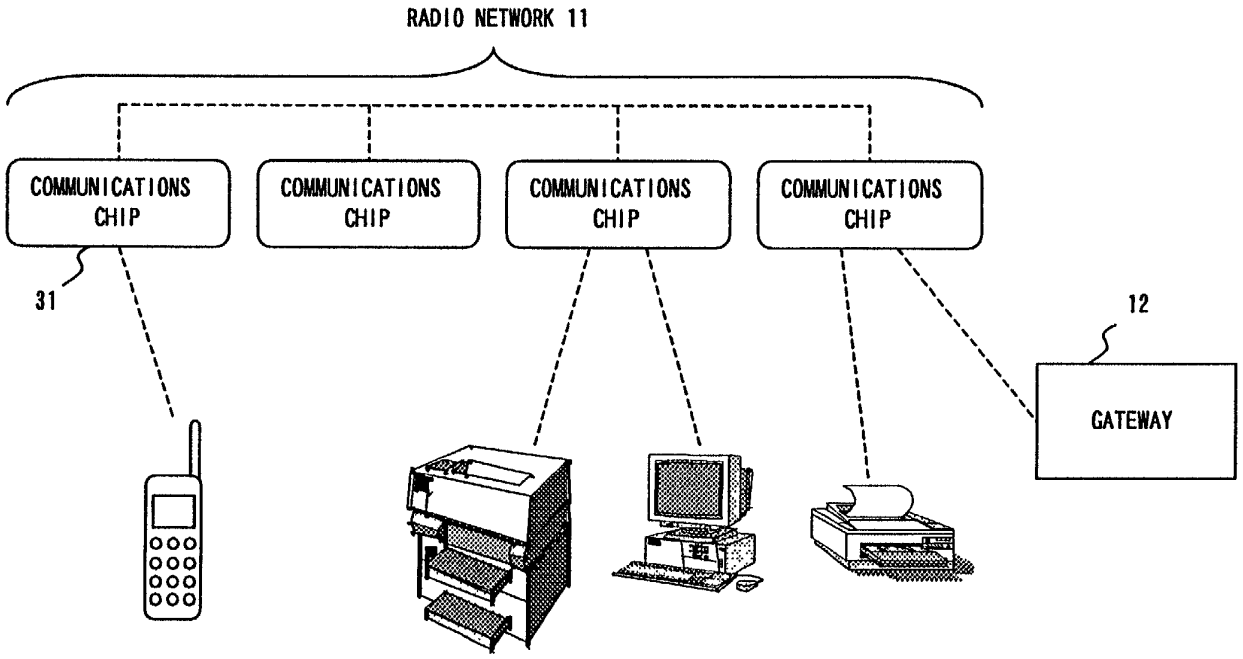

RADIO NETWORK 11
COMMUNICATIONS CHIP
COMMUNICATIONS CHIP
COMMUNICATIONS CHIP
COMMUNICATIONS CHIP
31
12
GATEWAY

FIG. 3

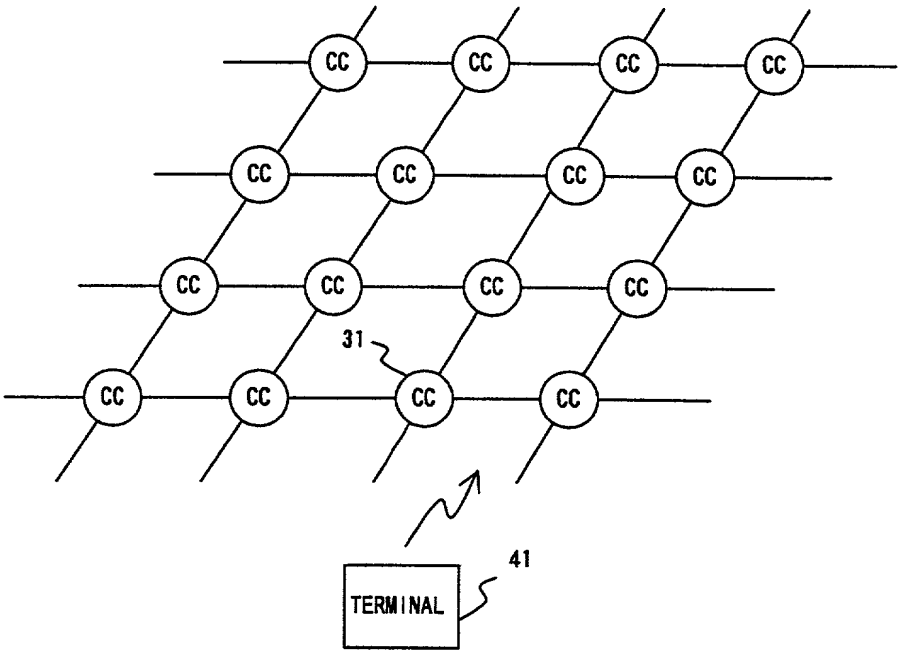


FIG. 4

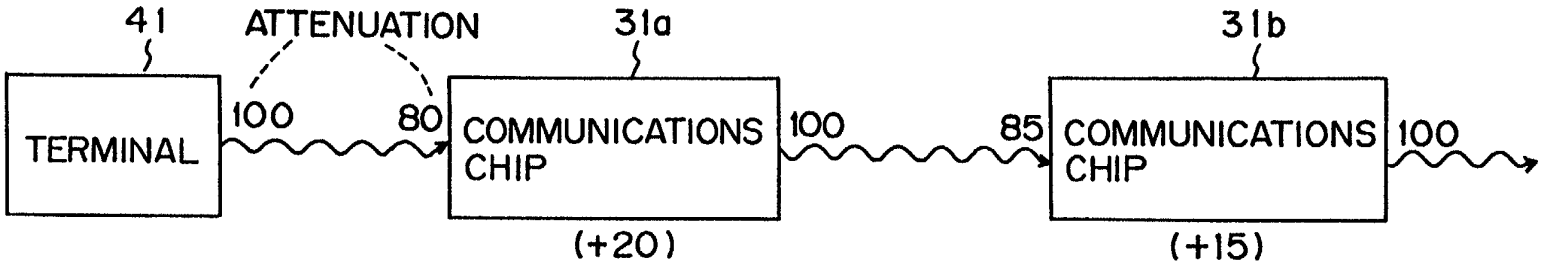

41
ATTENUATION
31a
31b
TERMINAL
100
80
COMMUNICATIONS CHIP
100
85
COMMUNICATIONS CHIP
100
(+20)
(+15)

FIG. 5

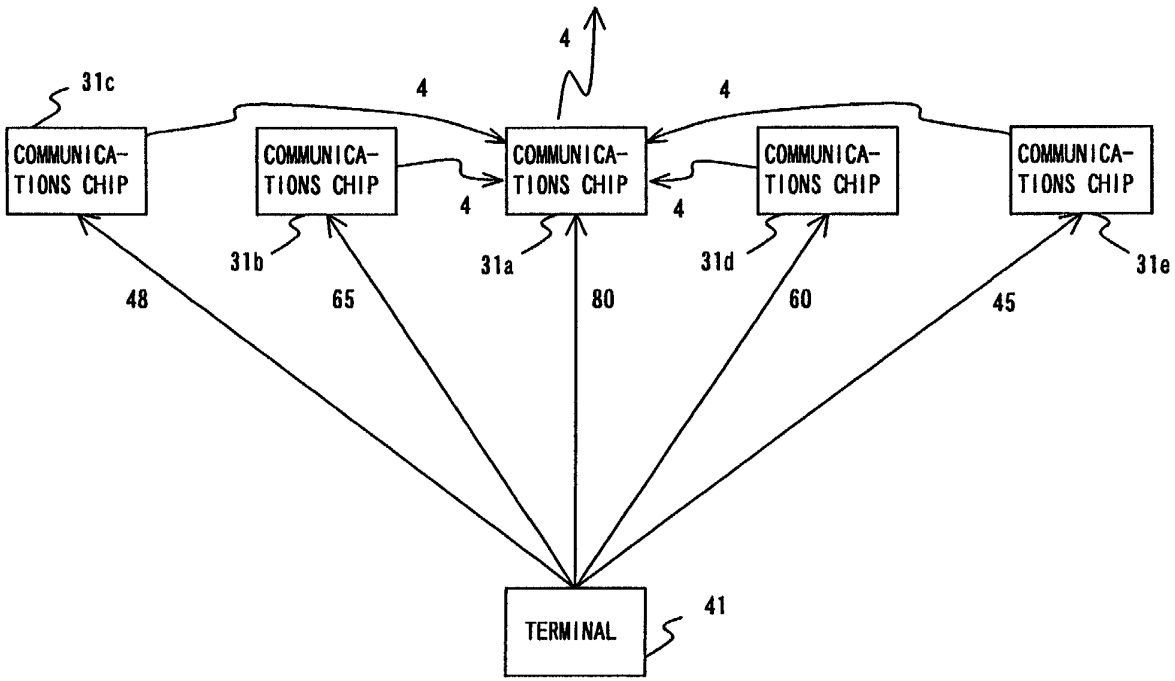

4
31c
4
4
COMMUNICA-
TIONS CHIP
COMMUNICA-
TIONS CHIP
COMMUNICA-
TIONS CHIP
COMMUNICA-
TIONS CHIP
COMMUNICA-
TIONS CHIP
4
4
31b
31a
31d
31e
48
65
80
60
45
TERMINAL
41

FIG. 6

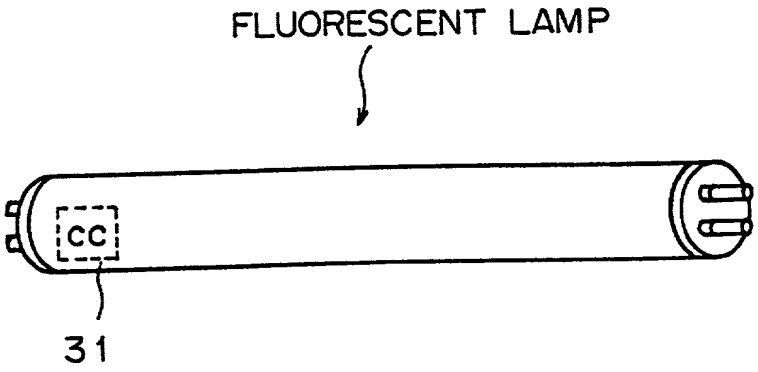


FIG. 7

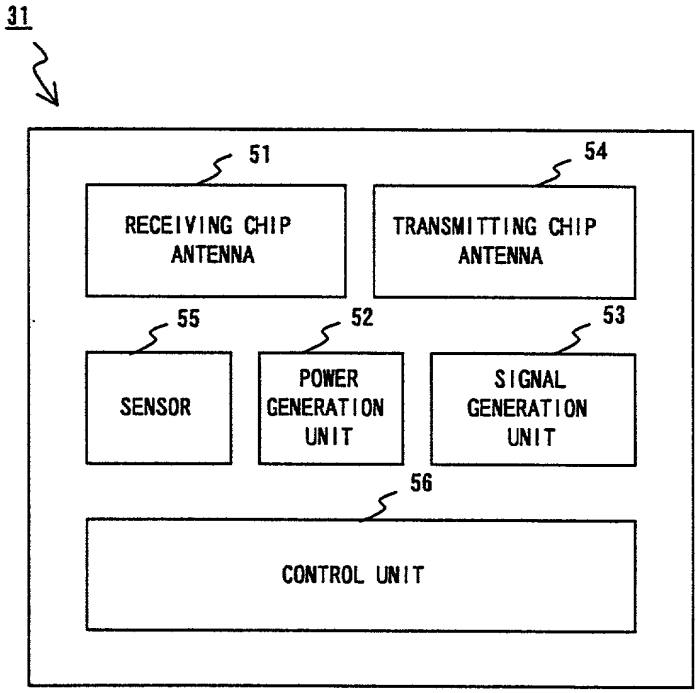

31
51
RECEIVING CHIP ANTENNA
54
TRANSMITTING CHIP ANTENNA
55
SENSOR
52
POWER GENERATION UNIT
53
SIGNAL GENERATION UNIT
56
CONTROL UNIT

FIG. 8

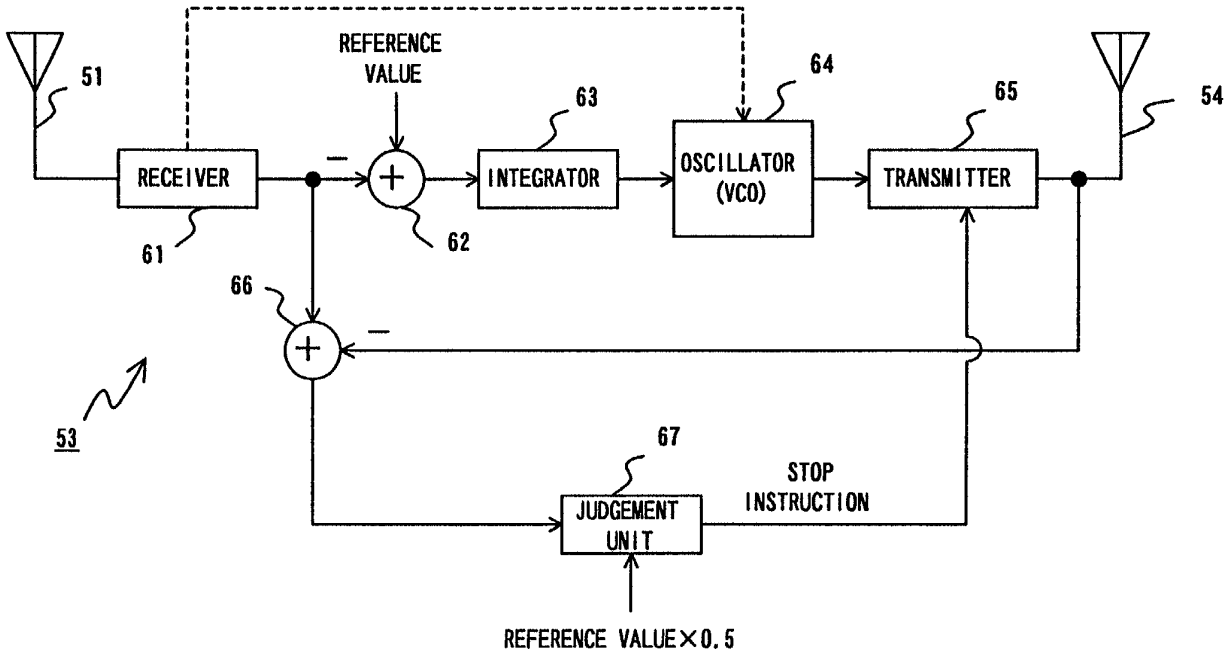

51
REFERENCE VALUE
63
64
65
54
RECEIVER
INTEGRATOR
OSCILLATOR (VCO)
TRANSMITTER
61
62
66
53
67
STOP INSTRUCTION
JUDGEMENT UNIT
REFERENCE VALUE×0.5

FIG. 9

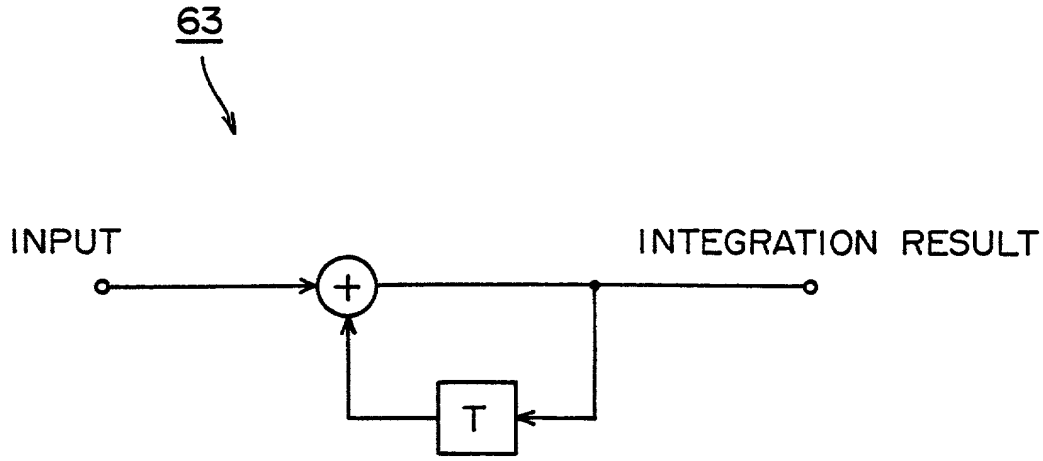
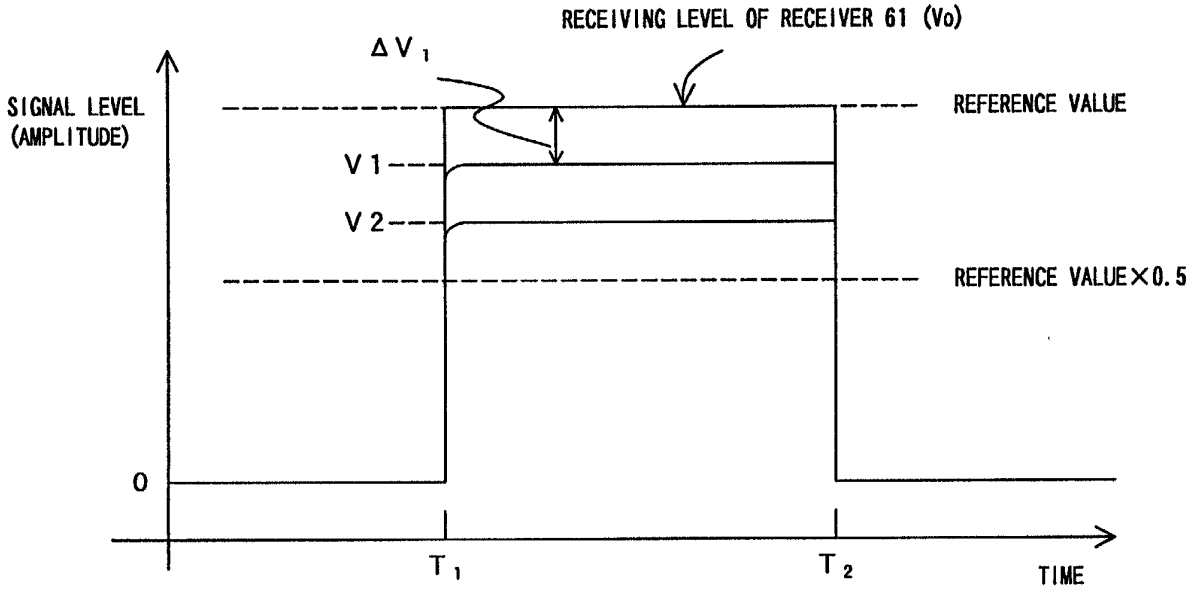


FIG. 10



V 1 : SIGNAL LEVEL OF RADIO SIGNALS FROM TERMINAL 41 AND COMMUNICATIONS CHIPS 31b-31e

V 2 : SIGNAL LEVEL OF A RADIO SIGNAL FROM TERMINAL 41

FIG. 11

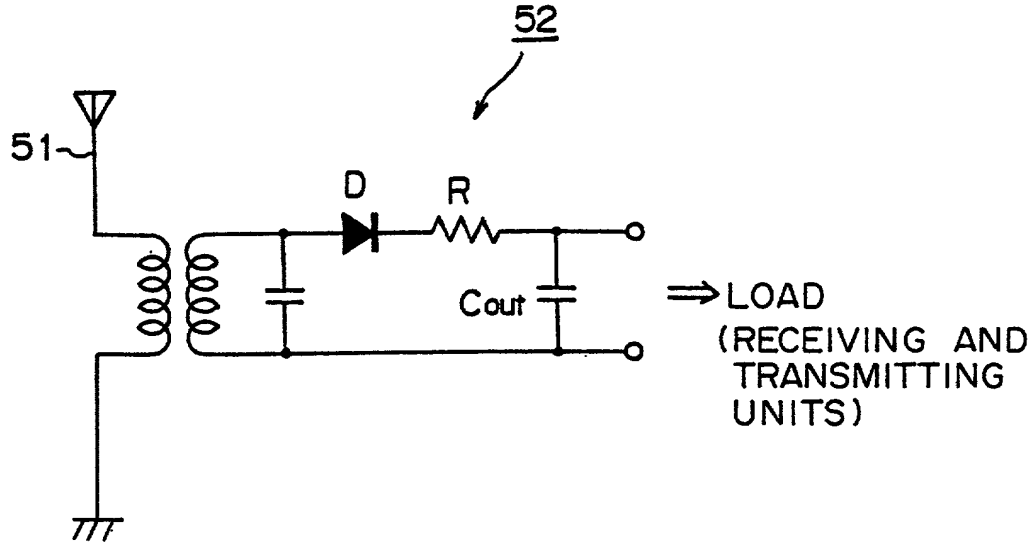


FIG. 12

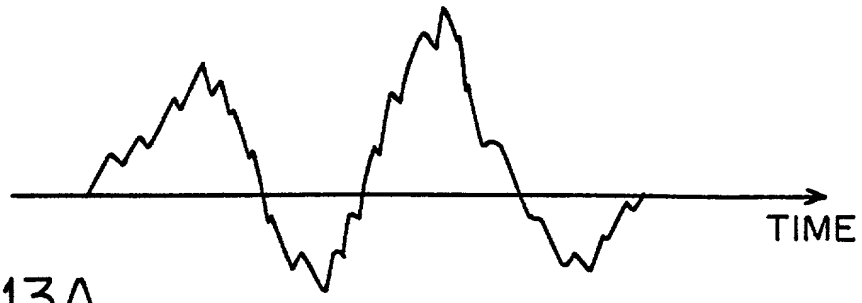


FIG. 13A

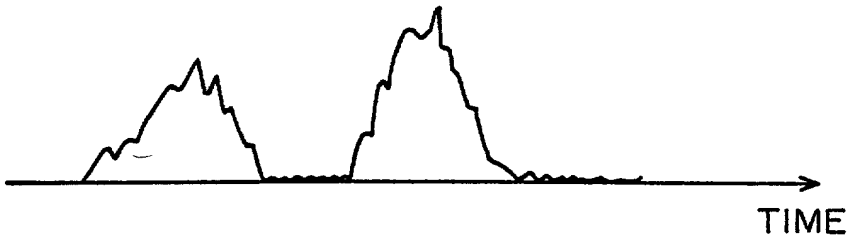


FIG. 13B

FIG. 13C

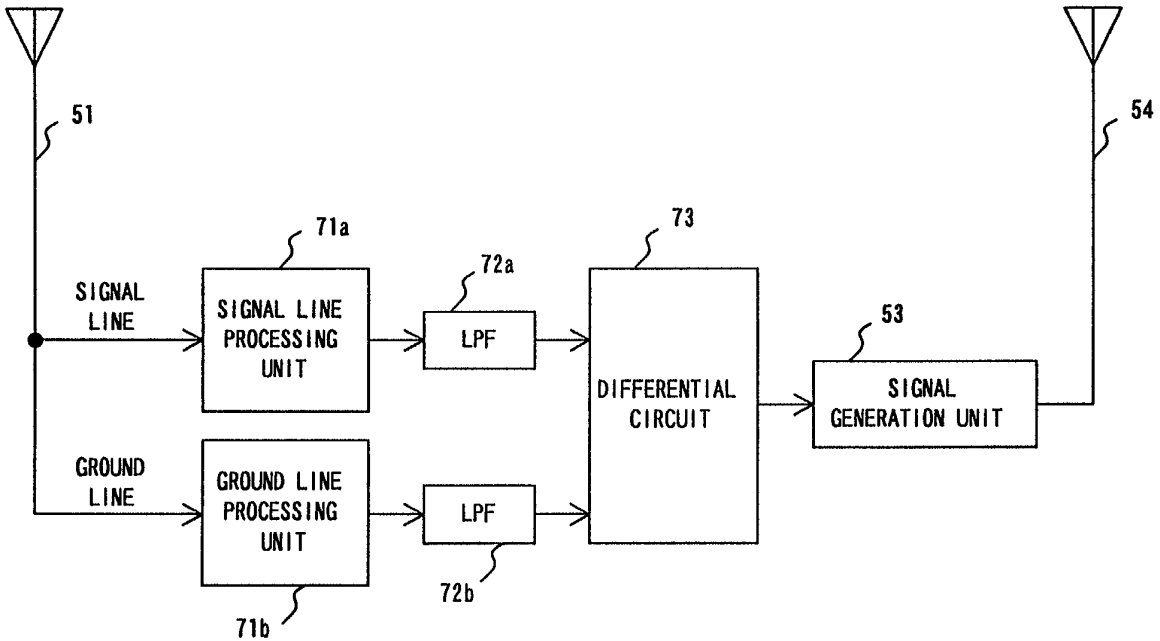

51
54
71a
73
72a
SIGNAL LINE
SIGNAL LINE PROCESSING UNIT
LPF
DIFFERENTIAL CIRCUIT
53
SIGNAL GENERATION UNIT
GROUND LINE
GROUND LINE PROCESSING UNIT
LPF
72b
71b

FIG. 14

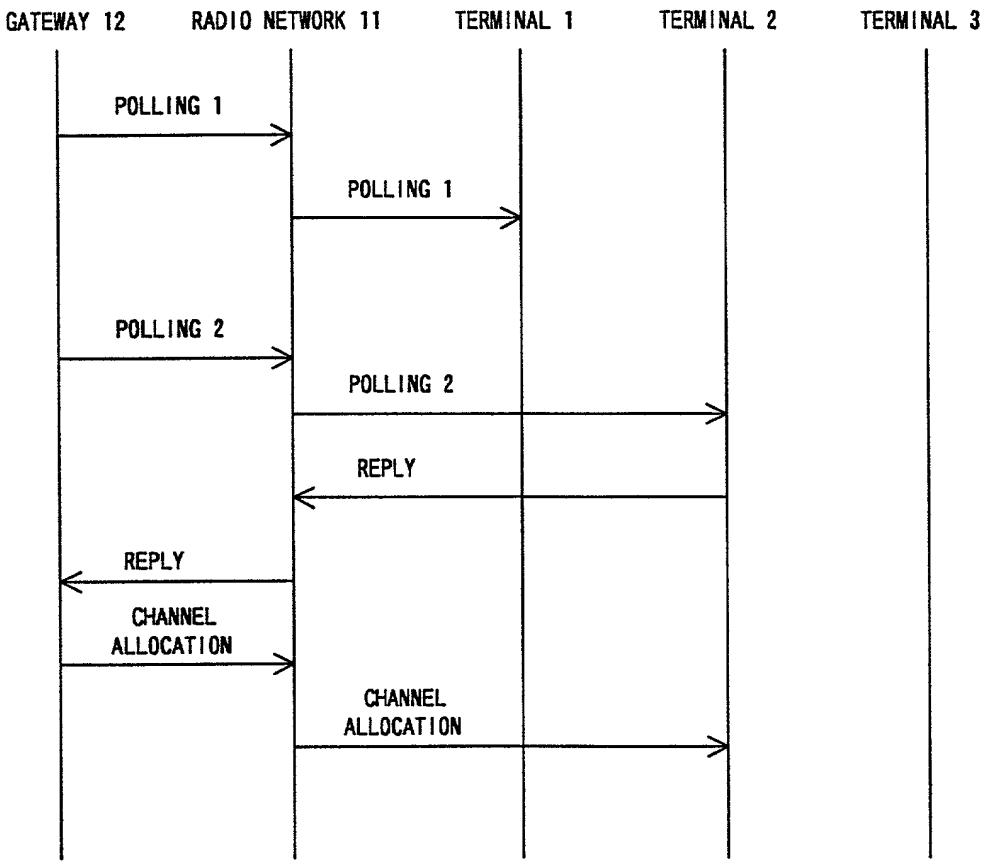

GATEWAY 12
RADIO NETWORK 11
TERMINAL 1
TERMINAL 2
TERMINAL 3
POLLING 1
POLLING 1
POLLING 2
POLLING 2
REPLY
REPLY
CHANNEL ALLOCATION
CHANNEL ALLOCATION

FIG. 15

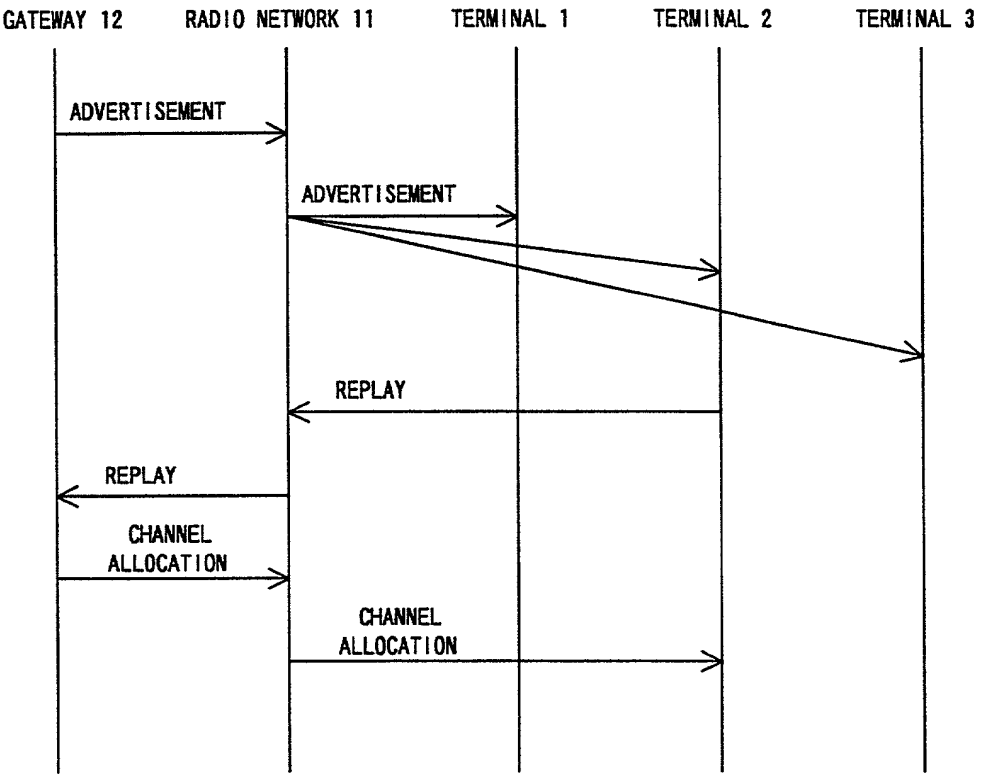

GATEWAY 12
RADIO NETWORK 11
TERMINAL 1
TERMINAL 2
TERMINAL 3
ADVERTISEMENT
ADVERTISEMENT
REPLAY
REPLAY
CHANNEL ALLOCATION
CHANNEL ALLOCATION

FIG. 16

COMMUNICATIONS CHANNEL	TIME SLOT	FREQUENCY	CODE	STATUS FLAG
1	1	f_a	c_a	IN USE
2	2			UNUSED
3	3			IN USE
⋮	⋮			⋮
n	n			IN USE
n+1	1	f_b		UNUSED
n+2	2			UNUSED
n+3	3			UNUSED
⋮	⋮			⋮
2n	n			UNUSED
2n+1	1	f_c		IN USE
⋮	⋮			⋮

FIG. 17

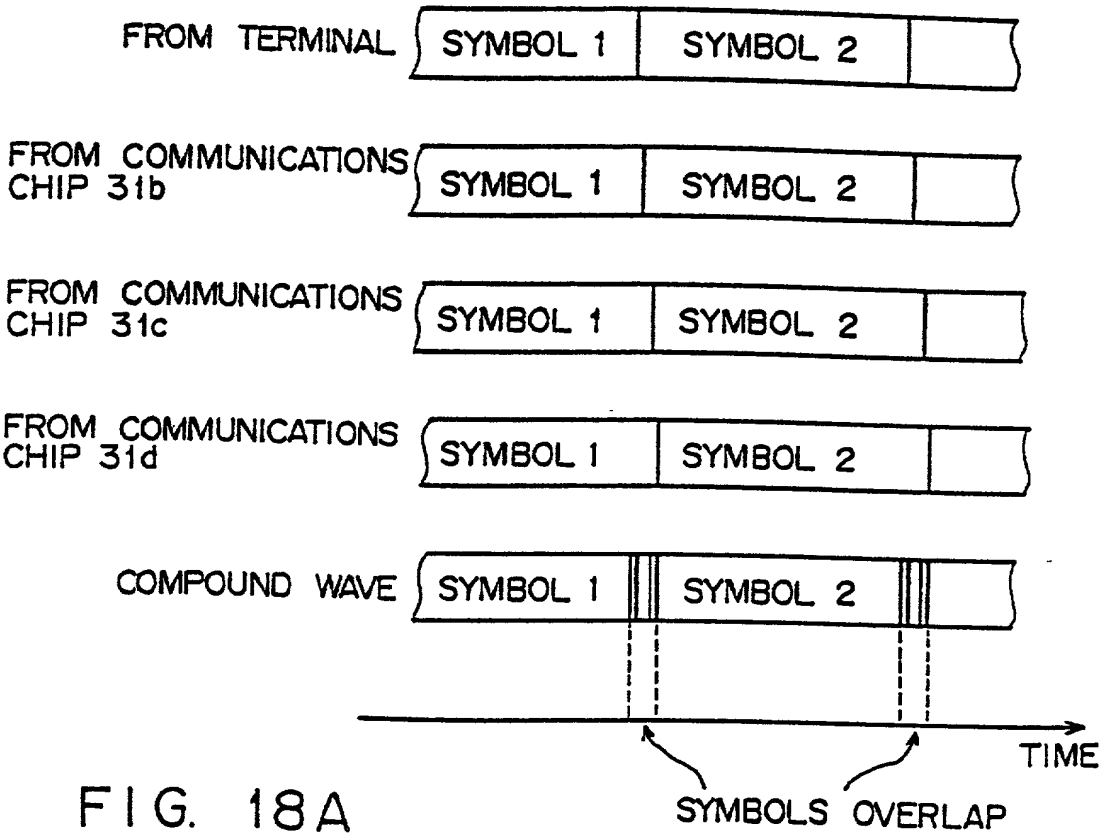


FIG. 18A

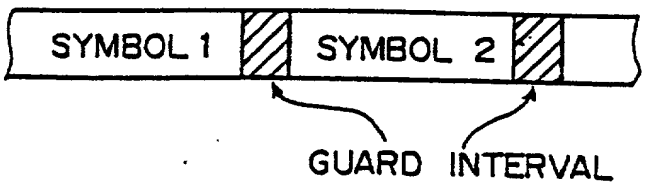


FIG. 18B